

Salmonellosis

Salmonella infection, or salmonellosis, is a common cause of mortality of wild birds at bird feeders, affecting many bird species nationwide.

Salmonellosis is caused by a variety of bacterial strains; strains differ in both their usual hosts including humans, domestic animals, wild birds, mammals, reptiles, amphibians, and fish and in how likely they are to cause disease in different hosts. Most recognized outbreaks in wild birds occur in passerine birds during the winter when they are nutritionally stressed and concentrated around bird feeders.

Disease transmission and signs

Salmonella bacteria live in the intestine and are shed in feces of infected birds. Birds contract salmonellosis through direct contact with infected birds or through ingestion of food or water contaminated with infectious feces. They can also contract the disease when feeding at tube feeders where their eyes may come in contact with a contaminated feeder. Birds can be carriers of the bacterium; they appear healthy but shed the infectious organism in their feces.

While all avian species can be susceptible to salmonellosis, it appears that house sparrows, common redpolls, American goldfinch, and pine siskins are among the most susceptible species and most commonly affected species at Wisconsin bird feeders. The feeding behavior of these four species, feeding in large groups that remain on the feeding grounds until the food supply is exhausted, likely results in greater exposure to contaminated areas and carriers of the infectious organism. Infected birds often die so quickly that signs of disease are not noticed. If signs are detected, they may include ruffled feathers, lethargy, unsteadiness, rapid breathing, and diarrhea.

Public Health Significance

Salmonellosis is of public health concern because all strains of *Salmonella* are **potentially** pathogenic to humans and animals. However, it appears that wild birds mainly acquire the disease from the environment and that **infected wild birds play a relatively small role in the transmission of disease to domestic animals and humans.** While dogs and cats are rarely infected, pets should be discouraged from consuming bird carcasses to reduce risk of contracting salmonellosis. Any potential human risk can be minimized by wearing disposable gloves when cleaning a bird feeder or birdbath.

Wildlife Management Significance

Salmonellosis is not thought to contribute to substantial population decline in wild bird species; however, the risk of salmonellosis can be reduced through simple precautions.

1. Clean feeders, feeding areas and birdbaths regularly using a 10% bleach solution as a disinfectant before a final rinse.
2. Clean up seed hulls under bird feeders.
3. Consider moving bird feeders periodically to prevent buildup of waste underneath the feeder.
4. Consider adding additional bird feeders to reduce crowding and reduce potential interaction and contamination
5. Keep seeds and food dry.
6. Change water in bird bath regularly.
7. Wear disposable gloves when cleaning a bird feeder or birdbath.
8. If you observe dead or sick birds near a feeder, take it down, discard all seed, and thoroughly clean the feeder. Wait at least a week before setting up the feeder again.

